

CLAIMS

We claim:

1. A support device for an elevator system, comprising:

5 a machine supporting portion that is adapted for securing a machine in a selected position;

a termination supporting portion that is adapted to secure a plurality of termination members in a selected position; and

10 a sheave supporting portion that is adapted to support at least one sheave, the supporting portions being secured together to form a single structure that supports the machine, the termination members and the sheave.

2. The device of claim 1, including a second termination supporting portion that is adapted to secure a second plurality of termination members in a selected position and wherein one of the pluralities of termination members are 15 associated with an elevator cab and the other plurality of termination members are associated with a counterweight.

3. The device of claim 1, including a second sheave supporting portion that is adapted to support a second sheave.

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4. The device of claim 1, wherein the supporting portions each comprise at least one metal sheet.

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5. The device of claim 4, wherein the supporting portions each comprise a plurality of metal sheets secured together.

6. The device of claim 1, wherein the machine supporting portion and the sheave supporting portion comprise two lateral beam members.

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7. The device of claim 6, wherein the lateral beam members are spaced from each other and the termination supporting portion comprises at least one transverse member extending between and secured to the lateral beam members.

8. The device of claim 1, including two spaced lateral beam members, at least one transverse beam member extending between and secured to the lateral beam members near each end of the beam members, and a mounting member near each end 5 of each of the lateral beam members, the mounting members adapted to secure the device to a structure that carries the load of the device and associated elevator system components.

9. The device of claim 8, including a plurality of vertical brace members 10 secured to each of the mounting members and corresponding portions of the lateral beam members.

10. An elevator system, comprising:

a machine having a motor and a drive sheave;

at least one idler sheave;

an elevator cab;

5 a counterweight;

a plurality of elongated load bearing members associated with the cab and the counterweight, the load bearing members being moveable about the drive sheave and the idler sheave in response to operation of the machine;

10 a plurality of terminations associated with ends of the load bearing members; and

a single support device that supports and secures the machine, sheave and terminations in a desired position relative to the cab and counterweight.

11. The system of claim 10, wherein the support device includes two

15 lateral beam members that provide support for the machine and the sheave.

12. The system of claim 11, wherein the lateral beam members are spaced from each other and including at least one transverse member extending between and secured to the lateral beam members for supporting the terminations

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13. The system of claim 12, including a second transverse member extending between and secured to the lateral beam members for supporting a second plurality of termination members and wherein the transverse members are secured to the beam members near longitudinal ends of the beam members, respectively.

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14. The system of claim 10, wherein the support comprises a plurality of metal beam members.

15. The system of claim 10, wherein the idler sheave and the drive sheave are positioned relative to each other so that the elongated load bearing members extend vertically, deflect about the idler sheave in a generally horizontal direction and then are wrapped at least 180° around the drive sheave.

16. The system of claim 15, wherein the idler sheave and drive sheave rotate about parallel axes.

17. A method of installing selected components of an elevator system, comprising:

5            preassembling a support device;

securing a machine to the support device; and

lowering the support device with the machine secured to the support device into a selected position in a hoistway.

18. The method of claim 17, including using a crane to lower the support

10    device and the machine into the selected position.

19. The method of claim 17, including lowering the support device into a first selected position in the hoistway and then subsequently raising the support device and positioning it in a second selected position in the hoistway.

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20. The method of claim 16, including securing at least one idler sheave to the support device such that the idler sheave is parallel with a drive sheave of the machine before lowering the support device into the selected position in the hoistway.